

## CHAPTER 4 DEVELOPMENT OF AN INSTITUTIONAL CONTROL PROGRAM

4-1. Introduction. Once site-specific objectives have been identified, the government and local community may use a variety of tools to aid in the development of an institutional control program. The first tool, institutional analysis, should be conducted at any site where an institutional control program is being considered. The other tools, a land use matrix and a land use classification scheme, can be helpful but their use is not required.

### 4-2. Institutional Analysis.

#### a. Overview.

(1) The institutional analysis is conducted during the EE/CA process. The institutional analysis process provides the opportunity to collect basic data to support an institutional control program. The objectives of the institutional analysis are to illustrate the opportunities that exist to implement an institutional control program at a specific site; identify government agencies having jurisdiction over OE contaminated lands; and assess the appropriateness, capability and willingness of government agencies to assert their control over OE contaminated lands.

(2) An institutional control program may consist of a single institutional control or a combination of strategies. The local community and stakeholders drive the development of the appropriate institutional control alternatives. The alternatives for the site should reflect the framework of the local institutions and the needs of the community. Therefore, the product of the institutional controls analysis should be the selection of the institutional control that is supported by the community and reflects the site-specific objects identified at the beginning of the project.

#### b. Assessment of Institutions.

(1) Local and state government agencies and other organizations can assist in the development, implementation and/or maintenance of the institutional control program. There are five elements to consider when assessing the ability of a local, state, Federal, or private agency to assist in the implementation or monitoring of a proposed institutional control program. The five elements are listed in Table 4.1 and discussed in the following paragraphs.

Table 4.1 Five Elements of an Institutional Analysis
<ul style="list-style-type: none"><li>• Jurisdiction of the Agency</li><li>• Authority Exercised by the Agency within its Jurisdiction</li><li>• Mission of the Agency</li><li>• Capability of the Agency</li><li>• Desire of the Agency to Participate in the Institutional Control Program</li></ul>

(a) Jurisdiction of the Agency. Federal, state, and/or local government agencies may have jurisdiction within the area of a project site. The laws governing the existence of the specific agency will convey this jurisdiction. Tribal governments and commissions may also have jurisdiction within certain areas. Determining which agency within the various levels of government has the appropriate jurisdiction for a specific site may prove challenging. In some areas, several agencies may be involved, depending on the type of institutional control or what specific aspect of an institutional control is being contemplated. Private agencies do not usually have any jurisdictional authority.

(b) Authority Exercised by a Government Agency within its Jurisdiction. Key questions that must be asked regarding the authority exercised by a government agency are listed below. Private agencies usually do not have any enforcement authority other than those provided by normal trespass laws.

- What are the limits of the agency's authority?
- What is the origin of the agency's authority?
- How much control is exercised by the agency?
- Does the agency have enforcement authority?

(c) Mission of the Agency. The specific mission of the agency is critical to its ability to implement, enforce, or maintain an institutional control program. Two critical missions for the USACE in OE response are public safety and land use control. If USACE can find a similar mission at another government or private agency, there is reasonable potential that a cooperative institutional control program can be implemented.

(d) Capability of the Agency. Even if an agency has the jurisdiction, authority, and mission to be involved in an institutional control program, if it does not have the capability, it cannot be an effective partner. In the case of local government agencies, the capabilities may be unique and are often a reflection of the desires of the local community. The capabilities of a government or private agency can be augmented, however, with additional funding in order to implement the additional requirements of the proposed institutional control program.

(e) Desire of the Agency to Participate in the Institutional Control Program. The desire of a particular government or private agency to participate in an institutional control program is absolutely critical to its success. The Federal Government must encourage the participation of a local agency in the implementation of an institutional control program. If local officials are convinced that participation in an institutional control program is in their best interests, USACE will have little difficulty in persuading them that they should participate. Resources in the form of funding for the agency's implementation costs may overcome the initial hesitancy to become involved.

(2) The basic data necessary to determine the jurisdiction, authority, mission, capabilities and desire of government or private agencies to assist in the implementation or maintenance of an institutional control program may be collected through a series of interviews with key personnel within the identified agencies. The interviews should be conducted through personal contacts. The data can be collected and collated to ensure complete coverage of all of the potential agencies. Appendix F includes a sample institutional analysis summary format. This information can then be summarized to determine which agencies can best assist in the institutional control program and to develop basic plans of action. Sensitivity to local concerns and some creativity will be required in developing a complete institutional control program for a site.

c. Determination of Any Land Restrictions. While performing the institutional analysis, it is necessary to determine the existence of any current deed restrictions or other type of institutional control that may have been placed on the property in the past as a result of some other activity. If such restrictions are found to already exist at a site, it may be easier to modify the existing restriction to address the OE risk than to implement an entirely new institutional control. A complete and thorough records search of the property must be performed in order to determine if any current restrictions exist. Local title search firms may be used to perform this function, as they are often the most knowledgeable about the best repositories of local property records.

d. Institutional Analysis Report. Upon completion of the data collection, the results of the study must be documented in an Institutional Analysis Report. The report may either be prepared as a stand-alone document or as an appendix to the overall site characterization report (e.g., EE/CA Report). The Institutional Analysis Report should include the following sections:

- (1) Purpose of the Study;
- (2) Methodology;
- (3) Scope of Effort;
- (4) Selection Criteria (Jurisdiction, Authority, Mission);
- (5) Acceptance of Joint Responsibility (desire to participate in the institutional control program);
- (6) Technical Capability;
- (7) Intergovernmental Relationships;
- (8) Stability;
- (9) Funding Sources; and
- (10) Recommendations.

#### 4-3. Other Tools to Aid in the Development of an Institutional Control Program.

a. Land Use Matrix. The Future Land Use Working Group has developed a land use matrix tool to aid in identifying and resolving complex issues related to restoration and reuse of contaminated sites. This tool has been developed to aid in building consensus among various stakeholders regarding the need for and level of institutional controls at a contaminated site. While the land use matrix was developed specifically for BRAC sites, it can also be used at any site where institutional controls are being proposed. By laying out the potential alternatives in matrix form, all parties can see the cost, benefit, and potential results of combinations of various remedial and institutional control alternatives. Table 4.2 lists the six elements of the basic matrix, which may be adapted to address site-specific conditions.

b. Land Use Classification Schemes. Another tool that is available to help define the level and extent of institutional controls is a land use classification scheme. A land use classification scheme identifies areas that are contaminated with OE and places use restrictions on those areas in accordance with the level of OE contamination. In addition to being a tool in the development of an institutional control plan, once a land use classification scheme has been developed it may also become a part of the program.

Table 4.2 Basic Elements of the Land Use Matrix	
Element 1: Remedy Alternatives	All potential methods for cleanup being considered at a site are referred to as remedy alternatives. All alternatives included in the matrix should meet both engineering and legal requirements.
Element 2: Cost	The cost of each remedy alternative should be estimated. The cost should include all aspects of the alternative, including construction, short and long-term monitoring, and operation and maintenance.
Element 3: Time until available for reuse.	The time available for reuse accounts for the time it will take to prepare the property for reuse, including the time required for preparation to lease or transfer by deed.
Element 4: Restrictions on Use	Any restrictions on use of the property after meeting the remedial action objectives should be listed and a description of the proposed institutional controls included.
Element 5: Alternatives for Reuse	Reuse alternatives may be general or specific. General categories include residential, educational, commercial, office, industrial, recreational, aviation, or open space. More specific reuse alternatives may be necessary depending on the nature of the risk posed by OE at the site.
Element 6: Potential for reuse at completion of the remedy	<p>The matrix uses three codes to differentiate among the potential for reuse. These codes include:</p> <ul style="list-style-type: none"> <li>★ Indicates that the site or a portion of the site is not feasible for a particular reuse because of the identified remedy.</li> <li>⊖ Indicates that there are some restrictions on a particular reuse of the site or a portion of the site for the identified remedy.</li> <li>☑ Indicates that there are no restrictions on a particular reuse of the site or portion of the site for the identified remedy.</li> </ul>